

REMARKS

Claims 1, 3, 5-10, 16 and 17 are pending in this application.

By this Amendment, claim 1 is amended to more clearly claim the subject matter therein, claim 10 is amended to depend from claim 1, claim 17 is amended to correct an informality, and claim 4 is cancelled.

No new matter is added by this Amendment. Support for the language added to claim 1 is found in the original specification, claims and figures. In particular, support for the language added to claim 1 is found at, for example, paragraphs [0012], [0013], [0018], [0037], [0039]-[0041], and Tables 2 and 3 as well as, for example, original claim 4.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Lavilla in the November 5, 2004 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

I. Allowable Subject Matter

Applicants thank the Examiner for the indication that claims 7 and 9 are allowed.

II. Claim Objections

Claims 1 and 17 were objected to for allegedly containing informalities. In particular, the Office Action alleges that the word "rupture" is misspelled. In response, Applicants herein amend claims 1 and 17 to replace the word "rapture" with the word "rupture".

As acknowledge by the Examiner during the November 5 interview, the requirements of the Patent Office have been met.

III. Rejections Under 35 U.S.C. §112, First and Second Paragraphs

Claims 1, 3-6, 8, 16 and 17 were rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite. Specifically, the Patent Office alleges that it is unclear what is meant by the term "predetermined," as recited in claim 1. In response to this rejection,

Applicants herein amend claim 1 to remove the word "predetermined". As acknowledged by the Examiner during the November 5 interview, this rejection is overcome.

Claims 1, 3-6, 8, 16 and 17 were also rejected under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the written description requirement, and because the specification, while being enabling for iron compositions that satisfy various compositional requirements, allegedly does not reasonably provide enablement for an iron-based compositions. The Office Action notes that at paragraphs 12 and 13 of the originally filed specification, iron compositions required for obtaining various fatigue limit ratios and ranges thereof are characterized.

Thus, to overcome the rejection, and as suggested by the Examiner during the November 5 interview, Applicants herein amend claim 1 to include that the rupture portion is composed of Fe-based sintered alloy, and the roundness of pores of the Fe-based sintered alloy is 0.004 or more so that the fatigue limit ratio determined by (fatigue strength)/(tensile strength) is about 0.3 or more, wherein at least one of Ni, Cu, Mo, Cr, and Mn is contained in a total amount of 0.1 to 5 mass %, and the C content in overall composition is 0.1 to 0.7 mass %.

During the November 5 interview, the Examiner acknowledged that the above recited features added to claim 1 in addition to reciting a fatigue limit ratio about 0.3 to about 0.45, would place the application in condition for allowance. However, Applicants submit that the exemplary embodiments are not limited to a fatigue ratio having an upper limit of 0.45. Specifically, according to Table 4, the maximum fatigue ratio is 0.53. However, as described in page 3 of the original specification, the fatigue ratio is dependent on the roundness of the pores. The fatigue ratio may be more than 0.53 if the roundness of the pores is sufficiently large, for example, up to 1.0. Thus, the mechanical fuse of the claims is not limited by an upper limitation for the fatigue ratio.

Applicants submit for the foregoing reasons, and as acknowledged by the Examiner during the November 5 interview, the above-described rejections under 35 U.S.C. §112, first and second paragraphs, are overcome.

Reconsideration and withdrawal of the rejections are thus respectfully requested.

IV. Rejections Under 35 U.S.C. §102(e) and §103(a)

Claim 10 was rejected under 35 U.S.C. §102(e) over U.S. Patent No. 6,332,842 (Tabuchi); under 35 U.S.C. §103(a) over U.S. Patent No. 4,846,769 (Allen); and under 35 U.S.C. §103(a) over Tabuchi. These rejections are respectfully traversed.

Applicants herein amend claim 10 to depend from claim 1. Thus, claim 10 is allowable for the same reasons as claim 1, and as acknowledged by the Examiner during the November 5 interview, these rejections are now moot.

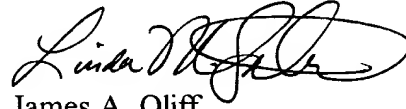
Reconsideration and withdrawal of the rejections are thus respectfully requested.

V. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3, 5-10, 16 and 17 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff

Registration No. 27,075

Linda M. Saltiel

Registration No. 51,122

JAO:LMS/eks

Date: November 8, 2004

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

**DEPOSIT ACCOUNT USE
AUTHORIZATION**

Please grant any extension
necessary for entry;

Charge any fee due to our
Deposit Account No. 15-0461